7418
7487

State of Utah
DEPARTMENT OF NATURAL RESOURCES

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

August 4, 2016

Michael Dalley
Staker Parson Companies
89 West 13490 South, Suite 100
Draper, Utah 84020

Subject: Fifth Review of Notice of Intention to Commence Large Mining Operations, Staker Parson Companies, Daniels Canyon Mine, M/051/0008, Wasatch County, Utah

Dear Mr. Dalley:

The Division of Oil, Gas and Mining has reviewed the referenced Notice of Intention to Commence Large Mining Operations (Notice or NOI) which was received June 17, 2016. The attached comments will need to be addressed before tentative approval may be granted.

The comments are listed under the applicable Minerals Rule heading; please format your response in a similar fashion. Please address only those items requested in the attached technical review by sending replacement pages for the original Notice using redline and strikeout text. After the Notice is determined technically complete, the Division will ask that you submit two clean copies. Upon final approval, both will be stamped approved, and one copy will be returned for your records.

Please submit your response to this review by October 7, 2016.

The Division will suspend further review of the Notice of Intention until your response to this letter is received. Please contact Leslie Heppler, at 801-538-5257 or me at 801-538-5261 if you have questions concerning the review. Thank you for your cooperation in completing this permitting action.

Sincerely,

Paul B. Baker
Minerals Program Manager

PBB: lah: eb
Attachment: Review
cc: Wasatch County – planning@co.wasatch.ut.us
P:\GROUPS\MINERALS\WP\M051-Wasatch\M0510008-DanielsCyn\Final\REV5-7418-08022016.docx

1594 West North Temple, Suite 1210, Salt Lake City, UT 84116
PO Box 145801, Salt Lake City, UT 84114-5801
telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • *www.ogm.utah.gov*

UTAH DNR
OIL, GAS & MINING

Fifth REVIEW OF NOTICEOF INTENTION TO COMMENCE LARGE MINING OPERATIONS

Staker Parson Companies
Daniels Canyon
M/051/0015
August 2, 2016

General Comments:

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
1		The Division may have additional comments based on the review responses.	lah	

R647-4-104 – Operator Information and Surface and Mineral Ownership

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
2	Page 7	As noted, please add ownership of minerals when the data is completed.	lah	
3	Page 7	The Division's lead agrees with the operator's comment D5.	lah	

R647-4-105 - Maps, Drawings & Photographs

105.1 - Topographic base map, boundaries, pre-act disturbance

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
4	Figure 3	Please show items required in R647-4-105.1, including other bodies of water (irrigation canal), electrical transmission lines, water wells, oil and gas pipelines, etc. within 500 feet of the disturbed area boundary	lah	

105.2 - Surface facilities map

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
5	Figure 3	There are several other facilities shown on the figure that will need to be accounted for in the reclamation cost estimate. Please label all. If the operator is not clear what the lessee has on site, simply label as Facility a, b, c and include the dimension in the calculations.	lah	

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
6	Fig. 7	The "future disturbed mining area" to the south half of the permit area shown on Figure 6 will directly impact the flow regime of Basin 2. Check dams shown may filter the run-on water coming from the up-gradient portion of the basin, but it will become the responsibility of the operator to capture it once it runs through the exposed working area. Consider diverting the run-on around the proposed future work area to reduce the size of the treatment basin needed at the outfall of the disturbed area.	mpb	
7	Fig. 7	It is not clear if the "drainage berm" shown is supposed to conduct runoff from the future disturbed area to the existing sediment ponds or not. Please put surface flow directional arrows on the map to show how the system will work. If the berm is not diverting water to the sediment ponds, a sediment pond will be needed to treat the runoff from the future work area (recommended).	mpb	
8	Fig. 8	A 100-year, 24-hour storm was used for the calculations. A 100-year, 6-hour storm might be more appropriate. As calculated, the sediment ponds don't have enough volume to capture the runoff from the current design storm.	mpb	
9	Fig. 8	Please explain how a C-factor of 0.33 was determined. The pre-disturbance soil types are approximately a 60-40 split of Type A and Type B soils, with 25-40% slopes. However, with the soil being removed and exposed rock as the runoff surface in roughly 33% of the basin areas, the overall C-factor may increase to as high as 0.50 or 0.60. Runoff volumes should be calculated for the disturbed area conditions.	mpb	
10	Fig. 8	Show the locations of culverts under US-40, and identify the receiving waters on the southwest side of the highway.	mpb	

105.3 - Drawings or Cross Sections (slopes, roads, pads, etc.)

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
11	Figure 9	It is not clear how the middle 2H:1V highwall will be accessed.	lah	
12	Figure 10	Please include horizontal distance on the cross sections or include a note that there is no vertical exaggeration.	lah	

R647-4-106 - Operation Plan

106.2 - Type of operations - mining method, onsite processing, deleterious or acid-forming materials

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
13	Pg. 9	Please be aware that deleterious materials include any materials regulated by the Utah Department of Environmental Quality as hazardous wastes, including fuels, oils, reagents, and solid wastes. Though the operator's intention is to remove all such wastes at the end of mine life, for bonding purposes the Division must assume the worst-case scenario that any such wastes that are, or will be, on site will remain on site and have to be properly handled and disposed by the Division using the bond. Please list and quantify any hazardous materials that will be used on site, or be part of any structure or facility on site.	mpb	

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
14	Omission	Please describe the vehicle maintenance activities that will be conducted on site, how and where they will be refueled, how waste oil is collected, the volume of the container(s) where it is stored, and show the locations on Figure 3. The volume and type of fuel contained in the fuel tank can be provided on Figure 3.	mpb	

106.5 - Existing soil types, location, amount

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
15		Previous comment: *The site-specific soil survey conducted by the NRCS indentifies significantly more topsoil (A horizon materials) than the 4-6 inches identified in this section. This section needs to be corrected to reflect the topsoil depths as determined by the NRCS.* New Comment: This comment was not adequately addressed (see new comment under 106.6). The analytical sampling results were identified as being located in Appendix B, but the Division could not locate Appendix B.	lk lk	

106.6 - Plan for protecting & re-depositing soils

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
16	Page 12	Previous Comment: *Please refer to comments made under R647-4-106.3. Also, where in most areas there is in excess of 12 inches of topsoil, please plan to salvage and stockpile a minimum of 12 inches. This section needs to discuss how stockpiles will be protected from erosion or other disturbances until used for reclamation. Finally, this section needs to describe how topsoil will be re-deposited at the time of reclamation. This plan should include the types of equipment to be used as well as the addition of any fertilizers or soil amendments, and the timing of when it will be done.* New Comment: A site-specific soil survey identified most of the area as having a minimum of 12 inches of soil material, but Section 106.3 says, "redeposition of soils during reclamation will be spread at a depth of 6 inches." As stated previously, please revise the NOI to show that a minimum of 12 inches will be salvaged and used for reclamation. Please note that in Section 109.3, the NOI does say that in excess of 12 inches of soil ***can*** be salvaged in new mining areas (not will be).	lk lk	

106.7 - Existing vegetation - species and amount

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
17		Previous Comment: *The vegetation survey provided does not identify the percent ground cover of vegetation for each of the vegetation communities. This data is needed to develop the reclamation success standard.* New Comment: The response to this comment identified the data is in Appendix D. Where is Appendix D? At this point it is assumed the comment was not addressed.	lk lk	

106.8 - Depth to groundwater, extent of overburden, geologic setting

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
18	Page12	Refer in the text to Figure 05.	lah	

106.9 - Location & size of ore and waste piles, tailings, ponds

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
19	Pg. 13	Please identify the 10,000-gallon water tank on Figure 3, and include the tank on the surety calculations	mpb & lah	

R647-4-108 - Hole Plugging Requirements

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
20	Page 15 para 2	As written the NOI says, ". . . into a producing and /or monitoring well . . . ." An artesian monitoring well would be a liability to the surface owner (versus a producing well). Please rewrite the statement to conform with R647-4-108.	lah	

R647-4-109 - Impact Assessment

109.1 – Projected impacts to surface & groundwater systems

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
21	Pg. 15	Concerning surface water the NOI says, "No perennial streams or intermittent waters have been or will be impacted by mining operations." This statement does not correlate to what is shown in Figures 6, 7, and 9 with relation to impacts to the ephemeral drainage in Basin 2 from future mining included in this NOI. Please describe the impacts to Basin 2, and describe measures that will be taken to mitigate those impacts.	mpb	

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
22	Table of Contents, former Appx F, and Pg. 15	In the Table of Contents, the operator commented in effect that they are not responsible for storm water permitting: ". . . the lessor is in charge of their permit and SWPPP." (In legal terms, the "lessor" is the party receiving payment for rent as the landlord. A "lessee" is the one paying the rent. Technically, Staker Parsons is the "lessor.") The NOI then follows up in Section 109.1 with this statement: "The site storm water pollution prevention plan (SWPPP) will be located with the Staker Parsons Companies Area Manager for review. A copy of the storm water permit (NOI) will be located in Appendix F." There are two problems with these statements: 1) This contradiction needs to be resolved. 2) An original or up-to-date copy of the SWPPP must be maintained on site so that employees can refer to it when needed, it can be updated as needed with required periodic documentation, and it is available for inspection by regulatory authorities. As the facility owner and operator of record in this NOI, Staker Parsons is ultimately responsible for meeting all permit requirements with the State, and would be the primary responsible party in the event of any situations that would result in a violation, including any violations of the Clean Water Act. In the event that the current lease agreement with J.B. Gordon Construction is terminated, the mine will still require a UPDES permit and SWPPP while inactive until it is fully reclaimed.	mpb	
23	Pgs. 14 & 15, & Fig. 8	Under "Water Storage/Treatment Ponds:" (Pg. 14) and "Surface Water:" (Pg. 15), the NOI says storm water controls were designed to handle a 10-year, 24-hour rain event. However on Figure 8, the calculations are for a 100-year, 24-hour event. Please clarify.	mpb	

109.2 – Potential impacts to threatened & endangered wildlife/habitat

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
24		Old Comment: *When will the wildlife surveys be done?* *Please provide the month each survey will be done and provide a date for submittal of the reports.* (This refers to the surveys for the short-eared owl and the smooth greensnake.) New Comment: In response to this comment, the operator removed the statement that surveys will be performed for the short-eared owl and the smooth greensnake when the timing is best to do so. Please provide an appropriate response to the original comments..	Lk lk	

109.3 – Projected impacts on existing soils resources

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
25		Old Comment: *Topsoil stockpiles should be relatively shallow (less than 15 feet) and should not have steep sides (3H:1V or flatter preferred). A 1.5H:1V slope on the stockpiles is likely to have erosion problems. If the slopes absolutely must be this steep, special erosion control measures may be needed, such as erosion control blankets, mulch, etc. Please describe the additional erosion control measures to be used in addition to seeding in the fall to prevent erosion if stockpiles are to be steeper than 2.5H:1V. Will other protection measures be employed to prevent disturbances to stockpiles, such as berms and signage?* New Comment: Other than removing the statement that topsoil storage piles will have slopes no greater than 1.5H:1V, this comment was not addressed.	lk lk	

109.4 – Projected impacts on slope stability, erosion control, air quality, public health and safety

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
26		As written "No slopes greater than 2H:1V will exist . . . ." As shown in the cross section and observed on the site visit, there are currently slopes steeper than "2H:1V". Please rewrite for accuracy.	lah	

R647-4-110 - Reclamation Plan

110.2 – Reclamation of roads, highwalls, slopes, impoundments, drainages, pits, piles, shafts, adits, etc

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
27	Pg. 19 and Fig. 9	The NOI says, "Drainages on site will be left in the natural state." This is contrary to Figure 9 which shows that the ephemeral drainage for Basin 2 would not be restored, but left as a flat area. The cross section drawings on Figure 10 also indicate that the floor of the pit would be sloped back toward the cut slopes, which would impound water, not pass it through the site. Revise Figure 10 to indicate a channel through the pit floor for Basin 2.	mpb	

110.3 - Facilities to be left for post mining use (buildings, utilities, roads, pads, ponds, pits, equipment, etc.)

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
28	Pg. 19	"All ditches and ravines important to the natural movement of water will remain after reclamation." See comment in 110.2 above.	mpb	

110.4 - Description or treatment/location/disposition of deleterious or acid forming materials, including map

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
29	Pg. 20	Provide line items in the bond calculations to allow the Division to conduct the remediation of any hazardous materials that would be left on site in a worst-case scenario. This would include emptying and disposing of the fuel tank, waste oil, hydraulic fluid, and antifreeze collection and disposal, and removal of other regulated hazardous wastes.	mpb	

R647-4-112 - Variance

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
30		None requested – no further action needed	lah	

R647-4-113 – Surety

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
31	Page 22	The 2007 bond document held by Wasatch County does not indicate that the Division is named as a co-beneficiary. The Division prefers to hold the surety and may need to enter a memorandum of understanding with Wasatch County. Please provide the Division with the Wasatch County contact information.	lah	
32		Please submit detailed reclamation cost estimates using the Division's bond forms.	whw	